



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of: Agarwal et al.

Application No. 10/002,779

Filed: October 29, 2001

For: METHODS FOR FORMING AND
INTEGRATED CIRCUIT STRUCTURES
CONTAINING RUTHENIUM AND TUNGSTEN
CONTAINING LAYERS

Examiner: David Vu

Date: January 7, 2003

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AMENDMENT

In response to the Office action dated October 7, 2002, please amend the subject application as follows:

In the specification:

Please replace the paragraph beginning on page 6, line 1, with the following new paragraph:

--If the layer 12 is formed via CVD, the deposition may be performed, for example, at pressures of 1-20 torr, desirably about 5 torr. The oxygen may be supplied in the form of O₂ or other oxidizing gas, such as N₂O, NO, or ozone (O₃). The oxygenating gas and a ruthenium precursor, and suitable diluent gasses, if desired, may be supplied at suitable flow rates, such as in the range of about 100-2000 sccm. Alternatively, the ruthenium precursor can be delivered by direct vaporization. Deposition may be performed for a time in the range of about 10 to 500 seconds, desirably for sufficient time and under sufficient conditions to deposit RuO_x or RuO₂ to a thickness in the range of about 100 to 600 Angstroms.--